Table of Contents

ANDRUS, R. E. & D. H. VITT. *Sphagnotheca Boreali-americana*: Fascicle II .. 645
AWASTHI, D. D. & K. P. SINGH. *Heppsora*, A new lichen genus from India 536
BARSTOW, J. M. & F. H. ERBISCH. Effects of acute gamma radiation and winter temperature-light conditions on photosynthesis of *Cladonia mitis* 83
BECKER, V. E., J. REEDER & R. STETLER. Biomass and habitat of nitrogen fixing lichens in an oak forest in the North Carolina Piedmont 93
BERNARD, T. & M. GOAS. Acides aminés libres et triméthylamine de quelques Stictacées 354
BOARDMAN, C. M. Mosses not previously reported from western Pennsylvania 351
BOWLER, P. A. *Ramalina thrausta* in North America 529
BRASSARD, G. R. Index to Volume 80 of the Bryologist 712
BRASSARD, G. R. & D. P. WEBER. New or additional moss records from Newfoundland III. 186
BROWN, D. H., D. L. HAWKSWORTH & R. H. BAILEY. Review 229
BUCK, W. R. & L. R. LANDRUM. A new species of *Astomiopsis* (Ditrichaceae) 359
CARVEY, K., D. R. FARRAR & D. C. GLENN-LEWIN. Bryophytes and revegetation of coal spoils in southern Iowa 630
CASE, J. W. Lichens on *Populus tremuloides* in western central Alberta, Canada 48
CHOPRA, R. S. New combinations in Indian Mosses 543
CHOPRA, R. N. & M. S. RAWAT. Studies on production and behavior of protonemal gemmae in some Bryaceae 655
CHURCHILL, S. P. Contributions toward a moss flora of Nebraska II 160
CHURCHILL, S. P. Mosses of the Great Plains II. South Dakota east of the Missouri River 544
CHURCHILL, S. P. & P. L. REDFEARN, JR. Hepaticae and Anthocerotae of Nebraska 640
CLAYTON-GREENE, K. A., T. G. A. GREEN & B. STAPLES. Studies of *Dawsonia superba* I. Antherozoid dispersal 439
CROSBY, M. R. *Florschuetzia*, a new genus of Buxbaumiaceae (Musci) from southern Chile 149
CROSBY, M. R. Recent literature on mosses—106–109 ..... 217, 384, 550, 695
CRUM, H. Dedication 1
CRUM, H. *Meiothecium*, a new record for North America 188
CRUM, H. William Campbell Steere: An account of his life and work 662
CRUM, H. & Y. MESCALL. *Grimmia pulvinata* in eastern North America 152
CRUM, H. & J. A. SNIDER. *Sphagnum quinquefarium* in the American West .. 156
CULBERSON, C. F., W. L. CULBERSON & D. A. ARWOOD. Physiography and fumarprotocetraric acid production in the *Cladonia chlorophaea* group in North Carolina 71
CULBERSON, C. F., W. L. CULBERSON & T. L. ESSLINGER. Chemosyndromic variation in the *Parmelia pulla* group 125
CULBERSON, C. F., W. L. CULBERSON & A. JOHNSON. Nonrandom distribution of an epiphytic *Lepraria* on two species of *Parmelia* 201
CULBERSON, W. L. Recent literature on lichens—95–97 ..... 208, 369, 701
CULBERSON, W. L. Review 229, 391
EGAN, R. S. New and additional lichen records from Texas II. 136

ERBISCH, F. H., J. B. LIGON & D. E. MATHENA. Measurement of tensile strength of *Cladonia* podetia 524
ERDMAN, J. A. & L. P. GOUGH. Variation in the element content of *Parmelia chlorochroa* from the Powder River Basin of Wyoming and Montana 292
ERDMAN, J. A., L. P. GOUGH & R. W. WHITE. Calcium oxalate as source of high ash yields in the terricolous lichen *Parmelia chlorochroa* 334
FAHSELT, D. & R. C. JANCEY. Polyacrylamide gel electrophoresis of protein extracts from members of the *Parmelia perforata* complex 429
FIGUEIRAS, M. L. & M. KEOGH. Perlatolic acid in *Glossodium aversum*: A lichen new to Venezuela 654
FORMAN, R. T. T. & D. L. DOWDEN. Nitrogen fixing lichen roles from desert to alpine in the Sangre de Cristo Mountains, New Mexico 561
FRAHM, J-P. Zur *Campylopus*—Flora von Mexico 119
FRECKMANN, S. K. Mosses of Portage County, Wisconsin 193
FRECKMANN, S. & F. D. BOWERS. New moss reports for Wisconsin 650
FRYXELL, P. A. Review 391
FULFORD, M. Recent literature on hepatics—76–78 ..... 223, 376, 380
GODFREY, J. D. New and interesting hepatics from British Columbia, Canada, and northern Washington State, U.S.A. I. 539
GOUGH, L. P. & J. A. ERDMAN. Influence of a coal-fired powerplant on the element content of *Parmelia chlorochroa* 492
GRADSTEIN, S. R. Peter Arnold Florschütz (1923–1976) 395
GRADSTEIN, S. R. Studies on Lejeuneaceae subfam. Ptychanthoideae (Hepaticae) IV. *Verdoornianthus*, a new genus from Amazonas, Brazil 606
GRIFFIN, III, D. Más adiciones a la flora musqueña de Venezuela 181
HAUSMANN, M. K. & D. J. PAOLILLO, JR. On the development and maturation of antheridia in *Polytrichum* 143
HERMANN, F. J. Validation of the name *Drepanocladus exannulatus* fo. *pseudotrichophyllus* 339
HOE, W. J. Additional new and noteworthy records for Hawaiian mosses—4. Recent collections from Haleakala National Park and adjacent regions, Island of Maui 328
HOFFMAN, G. R. & A. A. BOE. Ecological study of epiphytic cryptogams on *Populus deltoides* in northeastern South Dakota and adjacent Minnesota ... 32
HONG, W. S. Thalloid Hepaticae of Montana and Phytogeographical relationships to neighboring states and provinces 270
HONG, W. S. An annotated checklist of the Hepaticae of Wyoming 480
HONG, W. S. & D. H. VITT. Hepaticae of the Yukon Territory, Canada 461
HORTON, D. G. & W. B. SCHOFIELD. *Cololejeunea macounii*, a second locality in North America 647
JOHNSEN, I. & L. RASMUSSEN. Retrospective study (1944–1976) of heavy metals in the epiphyte *Pterogonium gracile* collected from one phorophyte ... 625
KARUNEN, P. & A. IHANTOLA. Studies on moss spores V. Carotenoids of *Polytrichum commune* 88
KARUNEN, P. & A. IHANTOLA. Studies on moss spores VI. Production of carotenoids in germinating *Polytrichum commune* spores 313
KLEE, R. & L. STEUBING. Die Veränderung der Atranorinkonzentration in Laubflechten durch Licht, Wasserversorgung und SO_2-Begasung 171

KUMAR, S. S. & C. N. NEGI. Additions to the moss flora of Himachal Pradesh I. 206
LAI, M-J. Bryoflora of Yuenyang Lake Natural Reserve, Taiwan 153
LANGE, B. Additional notes on the distribution of *Sphagnum pylaesii* 527
LEE, J., R. R. BROOKS, R. D. REEVES & T. JAFFRÉ. Chromium-accumulating bryophyte from New Caledonia 203
LEPP, N. W. & M. J. ROBERTS. Some effects of cadmium on growth of bryophytes 533
MAGILL, R. E. A reexamination of *Globulinella* (Musci; Pottiaceae) 76
MANUEL, M. G. Miscellanea Bryologica. I. *Meteorium aongstromii* Manuel, *nom. nov.* and *Penzigiella longinervis* Dix. *ex* Chopra, *nom. nud.* 198
MANUEL, M. G. Studies in Cryphaeaceae IV. New combinations in *Schoenobryum* 522
MANUEL, M. G. Monograph of the genus *Meteoriopsis* (Bryopsida: Meteoriaceae) 584
MATTERI, C. M. Review 708
MILLER, H. A. Charles Edmond Bradlaugh Bonner, servant of botany 399
MILLER, N. G. Review 392
MOGENSEN, G. S. *Seligeria diversifolia*, a moss new to Greenland 364
MUELLER, D. M. J. Editorial 232
NASH, III, T. H., S. L. WHITE & J. E. MARSH. Lichen and moss distribution and biomass in hot desert ecosystems 470
NEHLSEN, W. In vitro meiosis of *Sphaerocarpos texanus* sporocytes 184
NORRIS, D. H. Review 227, 228
OSORIO, H. S. Contribution to the lichen flora of Argentina X. Lichens from Santa Catalina, Buenos Aires Province 363
PAOLILLO, JR., D. J. Release of sperms in *Funaria hygrometrica* 619
PATWARDHAN, P. G. & A. V. PRABHU. Three new species of Parmeliaceae from India 348
PEARSON, L. C. & S. BENSON. Laboratory growth experiments with lichens based on distribution in nature 317
PECK, J. H. New state and county bryoflora records from Iowa 352
PETERSON, W. Clarification of the nomenclature of *Dicranum condensatum* .. 365
PURSELL, R. A. *Fissidens hoei*, sp. nov. from Hawaii 344
REESE, W. D. The genus *Syrrhopodon* in the Americas I. The elimbate species 2
REESE, W. D. Review 394, 556
RIEDL, H. Micro-biocoenosis of *Anthelia juratzkana* 332
ROBITAILLE, G. Review 392
ROSENTRETER, R. & V. AHMADJIAN. Effect of ozone on the lichen *Cladonia arbuscula* and the *Trebouxia* phycobiont of *Cladina stellaris* 600
SAYRE, G. Authors of names of bryophytes and the present location of their herbaria 502
SCHUSTER, R. M. Review 555
SCHUTTE, J. A. Chromium in two corticolous lichens from Ohio and West Virginia 279
SHEARD, J. W. Paleogeography, chemistry and taxonomy of the lichenized ascomycetes *Dimelaena* and *Thamnolia* 100

SEPPELT, R. D. Studies on the bryoflora of Macquarie Island I. Introduction and checklist of species 167
SLACK, N. G. & R. H. ZANDER. The 1976 A. LeRoy Andrews Bryological Foray 651
SMITH, C. W. Notes on Hawaiian lichens I. Obligately foliicolous species ... 342
SOLBERG, R. M. *Hygrohypnum closteri* and other noteworthy bryophytes in the Piedmont of North Carolina 163
SPECTOR, D. L. & T. E. JENSEN. Fine structure of *Leptogium cyanescens* and its cultured phycobiont, *Nostoc commune* 445
STOTLER, R. & B. CRANDALL-STOTLER. A checklist of the liverworts and hornworts of North America 405
THOMAS, R. J. Water relations of elongating seta cells in sporophytes of the liverwort *Lophocolea heterophylla* 345
UDAR, R. & D. K. SINGH. *Haplomitrium hookeri* in Western Himalayas, India 340
WARD, N. I., R. R. BROOKS & E. ROBERTS. Heavy metals in some New Zealand bryophytes 304
WEBER, W. A. Review 708
WEBER, W. A. & L. D. SIMONE. *Tetraphis pellucida* and *T. geniculata*: scindulae as diagnostic features in bryophytes 164
WEST, V. & R. STOTLER. Saxicolous bryophyte and macrolichen associations in southern Illinois II. Panther's Den, Union County 612
WILKINS, P. Observations on ecology of *Mielichhoferia elongata* and other "Copper Mosses" in the British Isles 175
WYATT, R. Spatial pattern and gamete dispersal distances in *Atrichum angustatum*, a dioicous moss 284
ZANDER, R. H. *Rhabdoweisia crenulata* and *Erythrophyllopsis andina* from Colombia 158
ZANDER, R. H. *Crossidium seriatum* found in the U.S.A. 170
ZANDER, R. H. The tribe Pleuroweisieae (Pottiaceae, Musci) in Middle America 233
ZANDER, R. H. Portraits of American bryologists and lichenologists in The Bryologist 559
ZANDER, R. H. & H. CRUM. *Desmatodon steereanus*, a new species of Pottiaceae from Peru 638
ZEHR, D. R. An autecological investigation of selected bryophytes in three sandstone canyons in southern Illinois 571